Report on

Space Protection of the Earth—1994
Problems of Earth Protection Against the Impact with Near-Earth Objects

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The participants of the conference, having considered presented materials and papers, came to the following conclusions:

1. The Near-Earth objects, such as asteroids and comets, which cross the Earth orbit, are of serious danger to human civilization.

2. Accumulated knowledge of the behaviour of space bodies and their interaction with planets as well as knowledge and technologies in the fields of space-missile, nuclear and production technologies are sufficient to begin the development of an international project of the Earth protection system against Near-Earth objects.

3. The most important current problems is refinement of risk assessment of NEO impact with the Earth, including:

   detection of the large NEOs with diameter 1km and more by astronomical means, determination of their orbit parameters and formation of applicable catalogues;
   evaluation of the numbers of small NEOs and their distribution by size;
   assessment of the detectability of NEOs of different size and composition;
   estimation of the consequences of NEO impacts with the Earth as a function of their dimensions and types.

4. It is necessary to conduct comprehensive researches of physical and chemical properties of NEOs.

5. It is necessary to investigate and estimate the possibility of preventing NEO impact with the Earth using technical means and technologies available for mankind.

6. It is necessary to determinate basic characteristics of the Earth protection system against impact with NEO and to estimate the efficiency of that system and the social-political and ecological consequences of its development by international efforts.

7. The conference should recommend "Program of Scientific-Technical Research for Development of Space Protection of Earth Against Near-Earth Object Impacts."

Conference appeal to the world community, governments and scientific organizations to pay attention to this problem and encourage its solution.